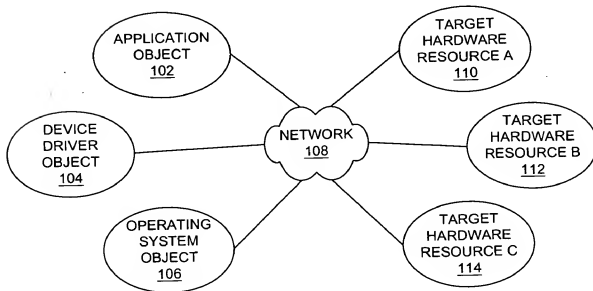
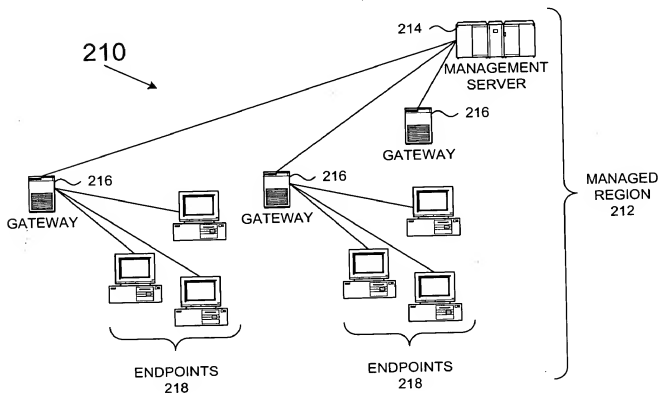


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**FIG. 1**  
(PRIOR ART)



**FIG. 2A**

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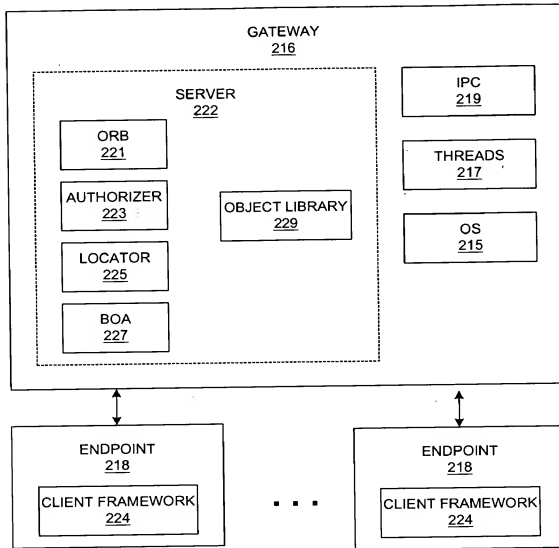


FIG. 2B

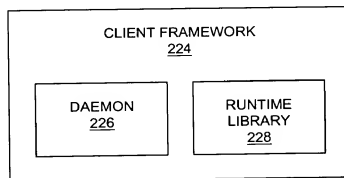


FIG. 2C

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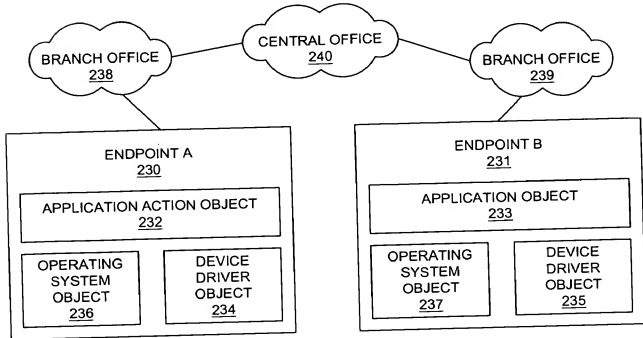


FIG. 2D

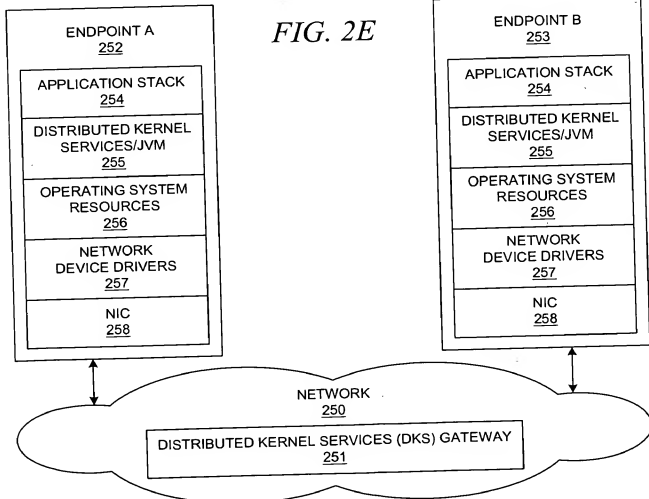


FIG. 2E

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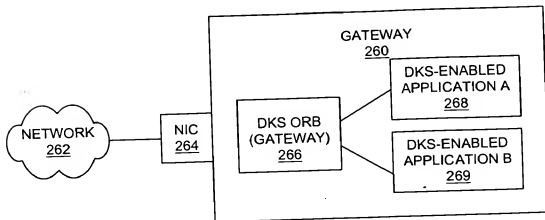


FIG. 2F

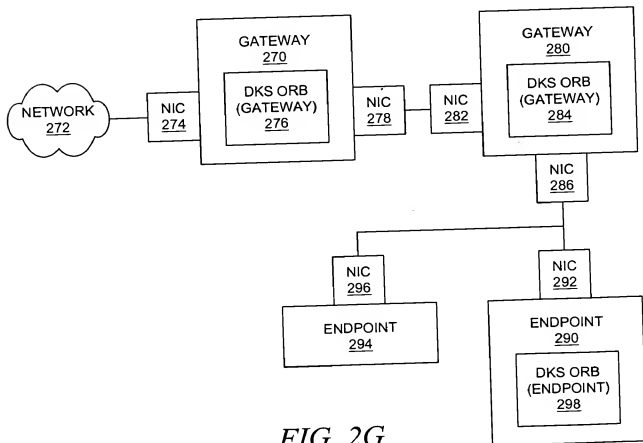


FIG. 2G

Method and system for network management with  
backup management with backup status gathering

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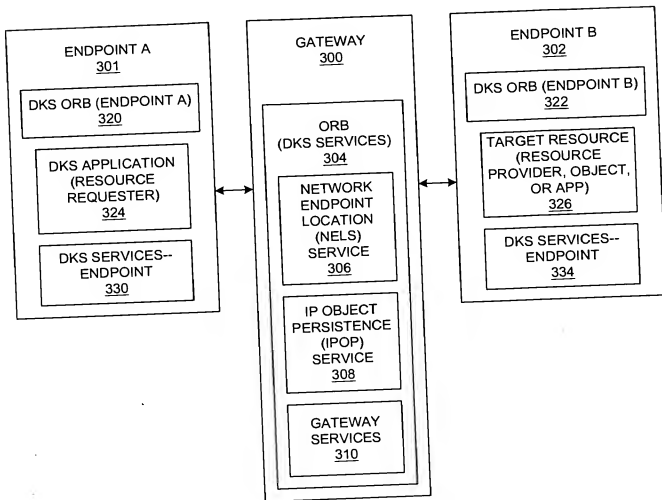


FIG. 3

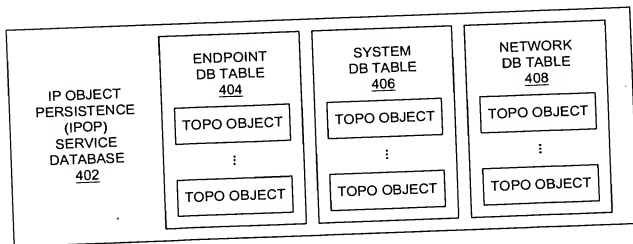


FIG. 4

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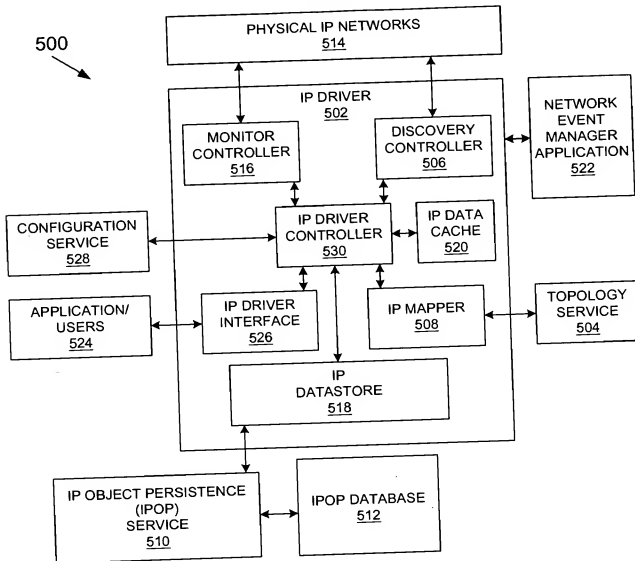


FIG. 5A

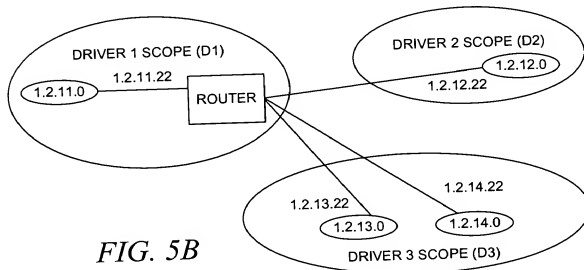


FIG. 5B

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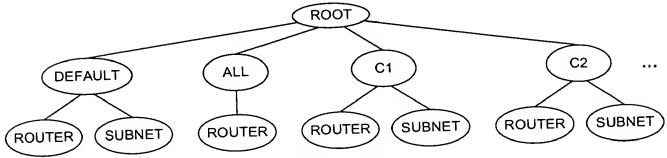


FIG. 5C

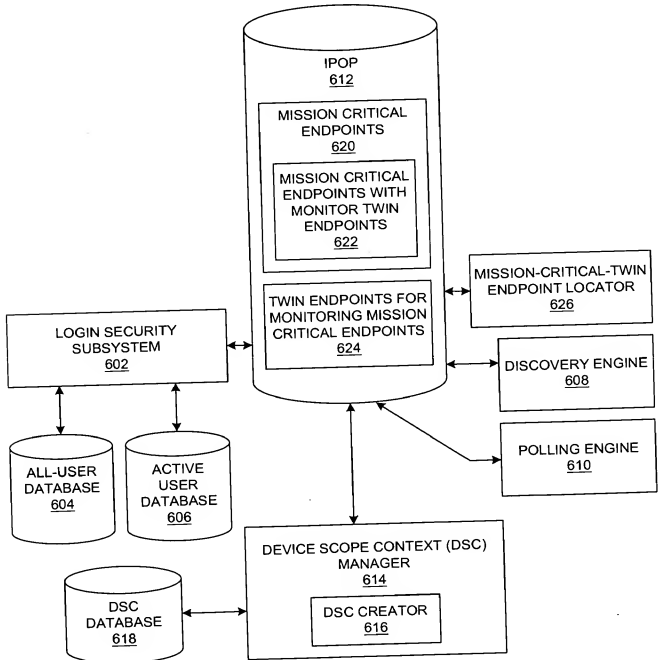


FIG. 6

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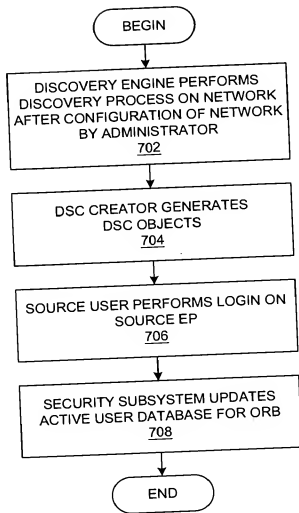


FIG. 7A

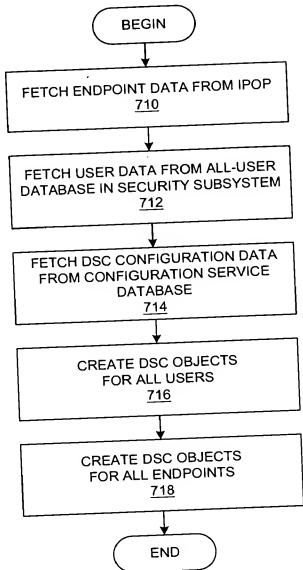


FIG. 7B

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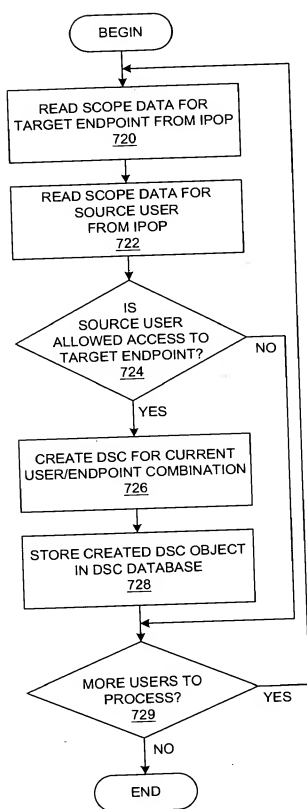


FIG. 7C

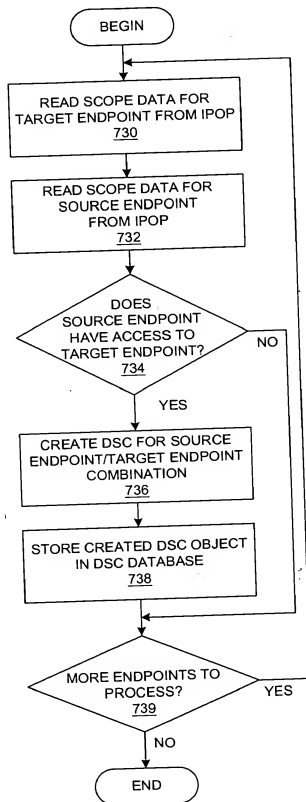


FIG. 7D

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800

**Network Management Application** □ □ ×

---

**ADAPTIVE MONITORING SETTINGS**

POLLING INTERVAL  MINUTES ~ 804

☒ SOURCE USER ~ 805  ~ 806

☐ SOURCE ENDPOINT ~ 807  ~ 808

---

**PRIMARY DSC**

☒ BY USER ~ 812

☐ BY ENDPOINT ~ 814

802

810       

816                      818

FIG. 8A

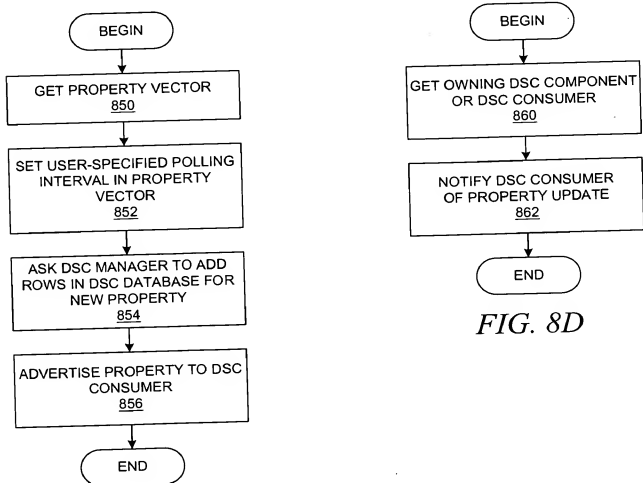


FIG. 8C

FIG. 8D

2007-09-26 10:09:40

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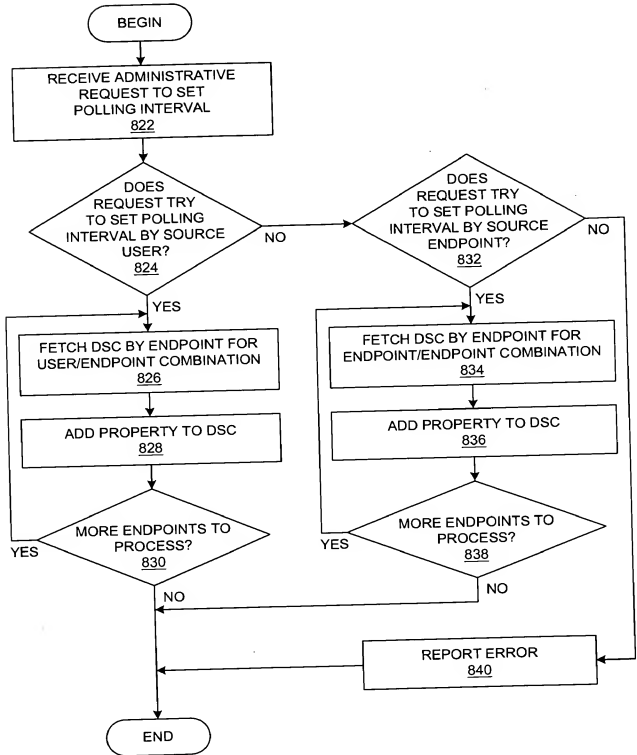


FIG. 8B

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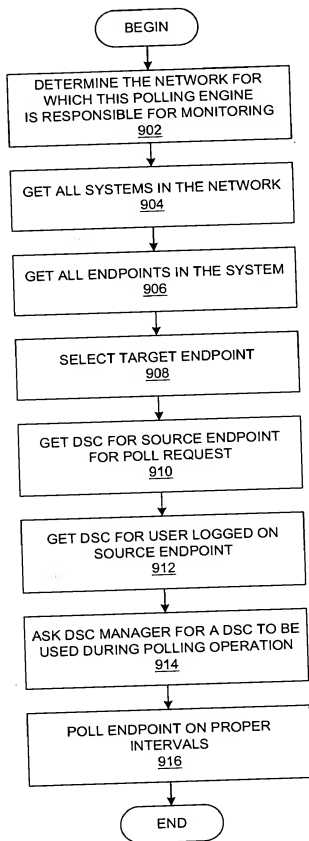


FIG. 9A

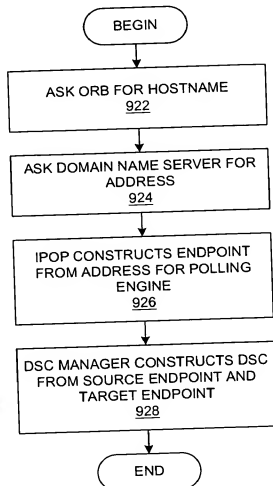


FIG. 9B

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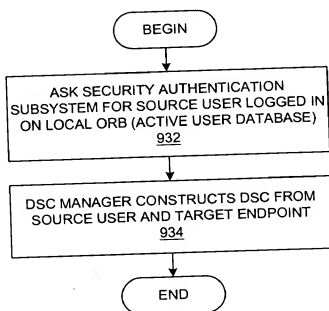


FIG. 9C

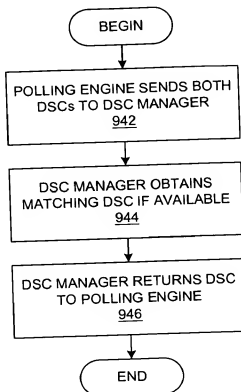


FIG. 9D

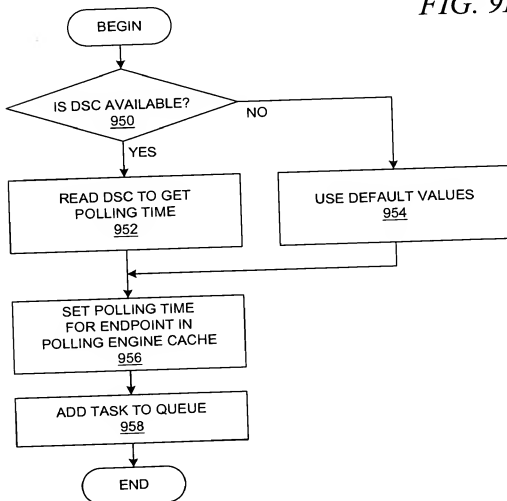


FIG. 9E

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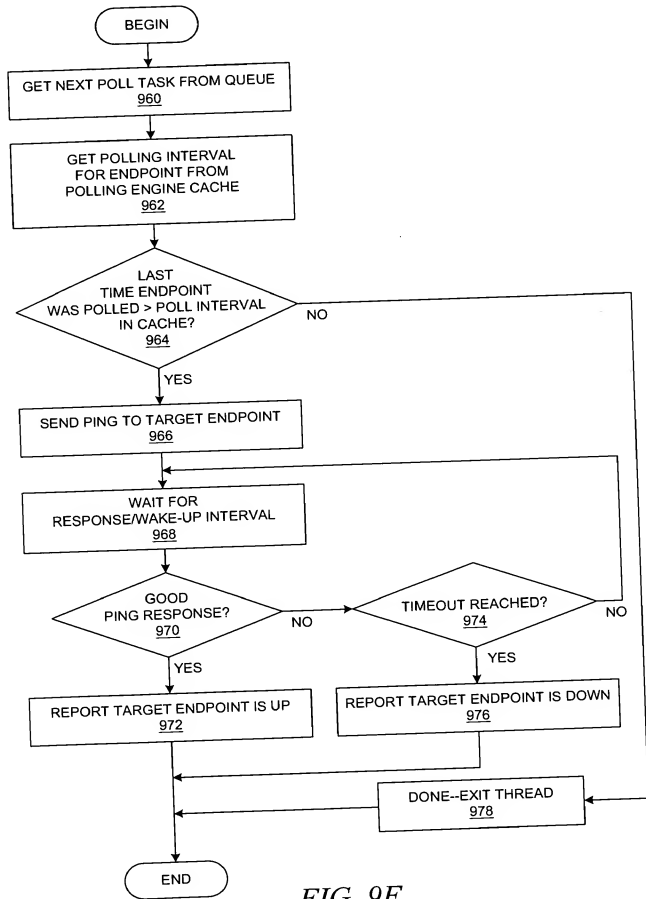


FIG. 9F

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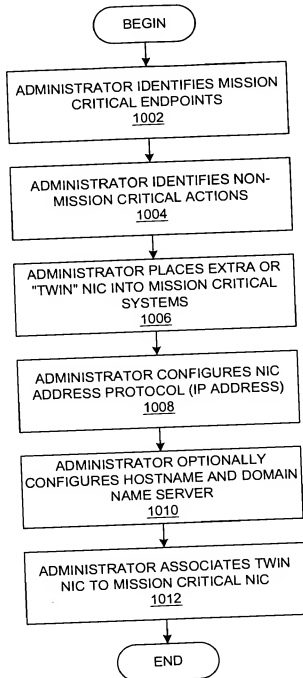


FIG. 10A

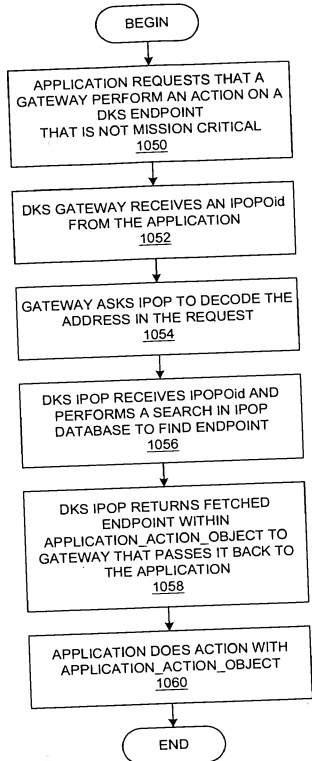


FIG. 10D

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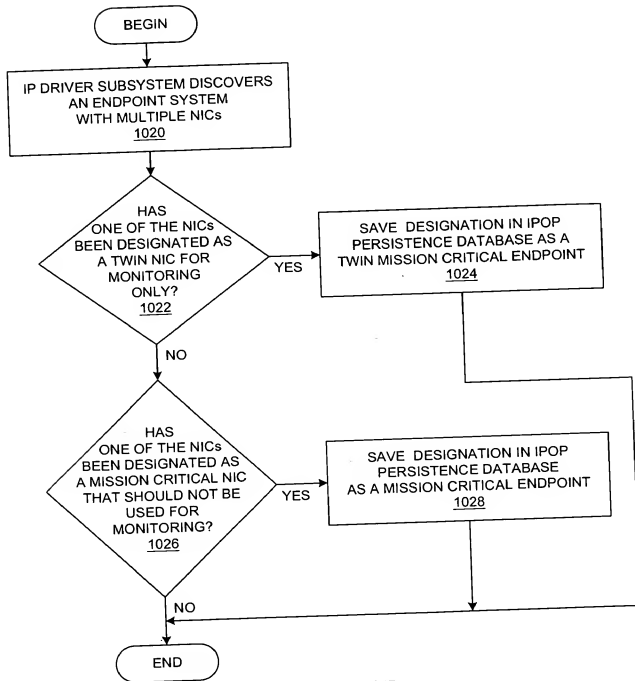


FIG. 10B



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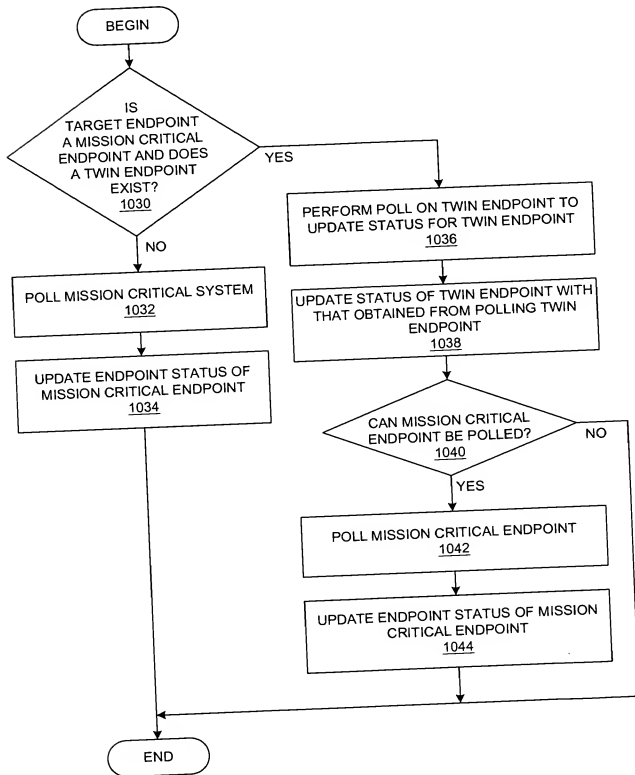


FIG. 10C

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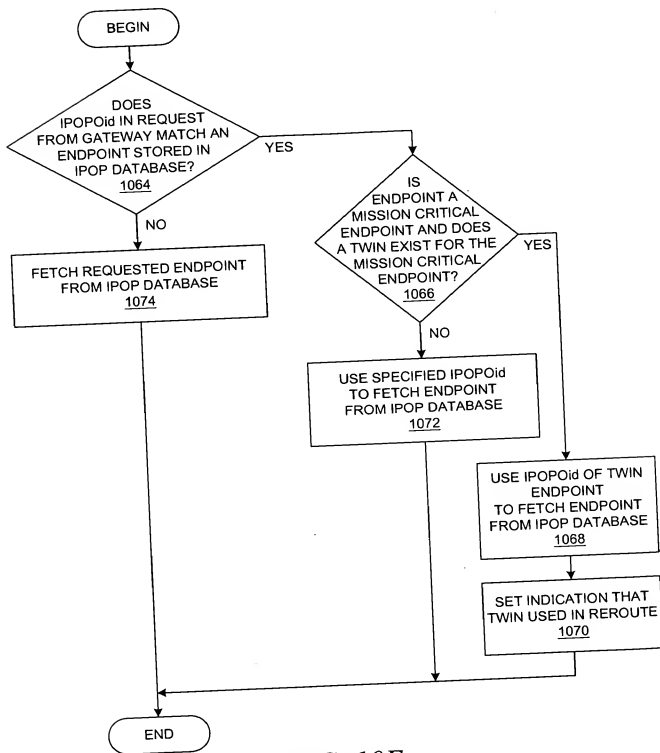


FIG. 10E

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Network Management Application

MISSION CRITICAL TWIN ASSIGNMENT--MISSION CRITICAL ENDPOINT: 7.17.13.11 1091

ENDPOINT TO USE AS TWIN:

☐ MAC ADDRESS: 1093

☒ VPN NUMBER: 1094 IP ADDRESS: 1095

1092

SET 1096 CLEAR 1097

FIG. 10F

CLASS ACTION\_OBJECT {  
    // CONSTRUCTOR  
    ACTION\_OBJECT( LONG IPADDRESS, SHORT VIRTUALPRIVATENETWORKADDRESS )  
        THROWS BADADDRESS ...  
    .  
    .  
    VOID PERFORMACTION( ) // EXECUTES ACTION METHOD  
    .  
    .  
}

FIG. 11A

CLASS APPLICATION\_ACTION\_OBJECT EXTENDS ACTION\_OBJECT {  
    boolean IsMissionCriticalAction;  
        // TRUE = USED TO PERFORM ENTERPRISE-RELATED WORK  
        // FALSE = USED TO PERFORM MONITORING OPERATIONS  
        // OR OTHER NON-REVENUE PRODUCING ACTION  
    boolean TwinUsedInReroute;  
        // TRUE = IPOP HAS REPLACED REQUESTED ADDRESS WITH AN ADDRESS  
        // THAT CAN BE USED FOR NON-MISSION CRITICAL ACTION  
    .  
    .  
}

FIG. 11B

Method and system for network management with  
backup management with backup status gathering

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Public Class Endpoint {

```
//public variables
long EPObjctID; // ID to object (both private and public network addresses)
InetAddress EPIPAddress; // physical network address (private or public)
long EPVPN; // virtual private network ID
```

```
// get/set of variables
public long getObjectID( ) { ... }
public InetAddress getAddress( ) { ... }
public long getVPN( ) { ... }
```

}

*FIG. 11C*

Class TwinMissionCriticalEndpoint extends Endpoint {

```

    IPOPOid missionCriticalEndpoint;
               // Mission critical endpoint that is used to gather status
    IPOPOid missionCriticalSystem;
               // Mission critical system

    long endpointStatus;
    long twinEndpointStatus;
```

}

*FIG. 11D*

Class MissionCriticalEndpoint extends Endpoint {

```

    boolean useForMonitoring; // TRUE = endpoint can be used for monitoring,
                               // polling, and other system-management-type
                               // resources
```

}

*FIG. 11E*

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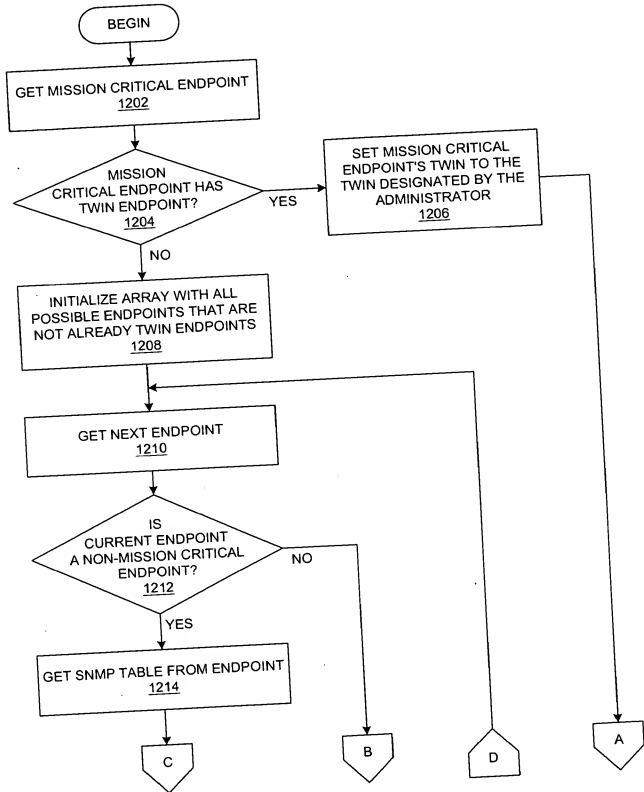


FIG. 12A

Method and system for network management with  
backup management with backup status gathering

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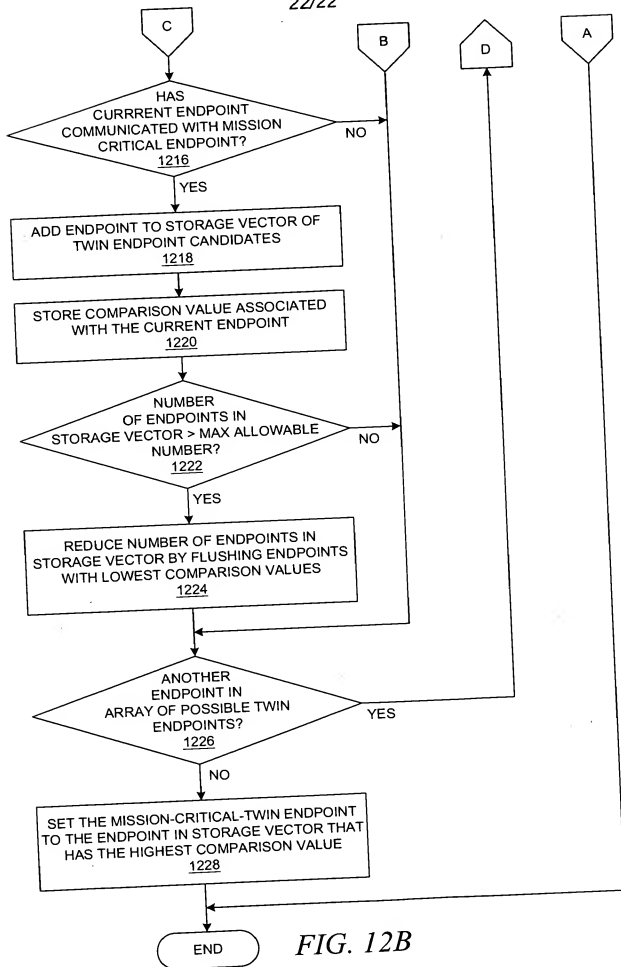


FIG. 12B